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ONTARIO CENTRE FOR MICROELECTRONICS

CORPORATE DIRECTORY

Board of Directors

Chairman
Charles M. Williams, Toronto.

Directors

John Bobak, Chairman & Vice President Manta Computer Technologies Inc.
Ottawa

Richard Brock President, Sutherland-Schultz Limited, Kitchener.

Wanda Dorosz, Vice President, NEXA Corporation, Mississauga.

Walter Pieczonka, Chairman of the Board and Chief Executive Officer, Linear Technology Inc., Burlington.

Timothy R. Pryor, President, Diffracto Ltd., Windsor.

Brian Riden, Vice President, Invar Manufacturing Limited, Batawa.

Graham Sadler, Vice President, Semi-Conductor Components Northern Telecom Electronics Ltd., Ottawa.

Marthe Schryburt, Ottawa.

Andrew Szonyi, Professor, Industrial Engineering and Management Studies, University of Toronto, Toronto

Roy Woodbridge, President, Canadian Advanced Technology Association, Ottawa.

Committees of the Board

Audit & Finance

Chair: *Roy Woodbridge*
Members: *John Bobak*
Brian Riden

Marketing

Chair: *Andrew Szonyi*
Members: *Richard Brock*
Roy Woodbridge

Public Affairs

Chair: *Wanda Dorosz*
Members: *Tim Pryor*

Strategic Planning

Chair: *Richard Brock*
Members: *John Bobak*
Marthe Schryburt
Andrew Szonyi

Technology

Chair: *Wally Pieczonka*
Members: *Brian Riden*
Graham Sadler

Senior Management

David Rothwell, Senior Vice President and General Manager
Glen Morrow, Vice President Finance and Administration
Karl Mayer, Vice President Technology

Auditors

Ward Mallette
Chartered Accountants
Ottawa, Ontario

Corporate Counsel

Gowling & Henderson
Barristers and Solicitors
Ottawa, Ontario

Principal Bankers

Bank of Nova Scotia
Ottawa, Ontario

LETTER FROM THE CHAIRMAN

Honourable Hugh P. O'Neil MPP
Minister of Industry, Trade and Technology

Dear Sir:

The past year has been one of considerable change for the Ontario Centre for Microelectronics. My appointment as Chairman, replacing Gordon Gow, the founding Chairman of OCM was one example. Lionel Hurtubise, the Centre's original President and Chief Executive Officer returned to private industry during the year. Ian Mumford, Vice-President of Corporate Affairs also left the Centre at the end of the fiscal year.

The contribution of these three to the growth and success of OCM in meeting its original mandate has been of major significance. We thank them for their dedication and unstinting effort.

Dr. David Rothwell, who joined OCM in June of 1986, as Vice-President, Marketing was appointed Senior Vice President and General Manager of the Centre at the beginning of the current fiscal year, and currently has full responsibility for the operating management of the Centre.

Change was highlighted in the Sunset Review which was completed in the fall of 1986. The review provided an opportunity to evaluate the performance of the Centre against its original objectives and to examine the relevance of OCM's mandate in today's industrial climate. Based on recommendations of the Board, the Cabinet has extended the Centre's mandate until December 1988.

The Ministry also asked that OCM provide a Three Year Business Plan which charted a path to increasing self-sufficiency. The foundation for that Plan was started immediately and has already yielded tangible results.

In its effort to reduce costs, the Centre negotiated the transfer of OLAM (On-Line Account Management) from OCM to the Canadian Library Association. Similarly, decisions were made this year to move the Centre to lower cost premises in October 1987 and to sharply curtail the Centres public awareness program.

The early positive signs that the Centre's strategies are taking hold provide me with a sense of optimism about the future of OCM. I would like to thank those who have contributed so much in the past, and to encourage the current Board, Management and Staff to support the very positive course charted for the future.



Charles M. Williams
Chairman of the Board

GENERAL MANAGER'S REPORT

The 1986/87 fiscal year marked a watershed for the Ontario Centre for Microelectronics. The Sunset Review provided an opportunity to reflect on the impetus for founding the Centre and whether the original objectives had been met. As a result of the significant effort which went into the Review, the Centre has now formulated a business strategy which it intends to pursue over the next three years.

The Sunset Review allowed the Board of Directors and Management to examine and challenge many of the fundamental assumptions used to establish OCM. The report analyzed six scenarios for continued operation, ranging from privatization to an orderly closing of the Centre. It concluded that OCM had indeed accomplished the majority of its original objectives; however, changes in the market and technology require a new mode of operation to meet the challenges of tomorrow.

The operating principle behind the Sunset Review was that "... microelectronics is the foundation of all future economic growth. Other key technologies, such as robotics, CAD/CAM, biotechnology and aerospace, ultimately depend upon microelectronics for their advancement. Without application of microelectronics to most products and services, Ontario industry will be less productive and less competitive than other nations".

When the Centre was established, application specific integrated circuits (ASIC's) were projected to be the main source of revenue for the Centre. The lack of ASIC design contracts, and hence the projected revenue base, is reflected in the industry as a whole which has experienced much slower development than originally forecast by the experts. A number of factors are responsible:

1. World-wide ASIC demand has not yet met industry forecasts; indeed the semiconductor recession of 1985 has left the Canadian electronics industry struggling to reach pre-recession output levels.
2. The Canadian electronics market is not directly comparable in relative size to the U.S., being much smaller than Canada's population and industrial output would initially suggest.
3. Canada's branch plant economy has retarded domestic ASIC development because many multinationals rely on their parent for advanced technology, including integrated circuit design.
4. Fierce, and often predatory, competition among U.S. silicon foundries has attracted many designs directly south of the border.

While the Centre has traditionally focused its marketing efforts towards existing electronics firms, a greater portion of its revenue now comes from non-electronic companies. OCM has noted a strong trend for additional non-electronic manufacturers to become interested in micro-electronic solutions. In their search to increase functionality, reduce costs and increase efficiency, many manufacturers are examining the role of microelectronics in their systems. The key to exploiting this emerging opportunity will be a knowledge of the client's product and the market in which he operates. Canadian manufacturers are looking for product solutions, not technology solutions.

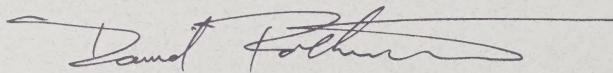
The Sunset Review also provided the basis to develop a new "pro-active" marketing strategy. As such, OCM has developed a number of focused market objectives. Included in these initiatives is the Fortune 500 campaign of direct personal contact with senior executives of large non-electronic manufacturing firms and the selected segmentation of the health care and military markets. The process of streamlining client qualification and proposals has already led to notable increases in efficiency. In total, 280 technical contacts were generated during the year resulting in 116 proposals, of which 40 became signed contracts.

The diffusion and awareness process of microelectronics technology has always been a key focus for OCM. While this function will continue, the need to decrease non-revenue generating activities has meant that the public awareness program will not receive the same emphasis as in the past. The Microbits mailing list has been pruned sharply and tours have been dropped. Public contacts therefore declined to 35,630 in this fiscal year. On the other hand, the training program has shown strong revenue growth; the number of courses increased to 50 in the fiscal year, of which 12 were in-house sessions. Total attendance by senior executives and electronic engineers was 937, an increase of 84 percent over last year.

In parallel with efforts to improve revenues has been the drive to reduce costs. Significant initiatives to lower operating costs were undertaken, those cost saving measures are continuing in the new year.

The Centre has taken an active leadership role in the Canadian microelectronics infrastructure through participation in a number of industry associations including, the Canadian Semiconductor Design Association, the Canadian Microelectronics Corporation, the Canadian Association of Microelectronics Centres, the Canadian Advanced Technology Association, the York Technology Association, the Ontario-Carleton Research Institute and the Electrical and Electronics Manufacturers Association of Canada.

I, along with the management and staff of the Ontario Centre for Microelectronics, look forward with enthusiasm to the future.



David Rothwell
Senior Vice President and General Manager

FINANCIAL STATEMENTS AUDITORS' REPORT

To Ontario Centre for Microelectronics and
Minister of Industry, Trade and Technology
of the Province of Ontario:

MARCH 31, 1987

We have examined the balance sheet of the Ontario Centre for Microelectronics as at March 31, 1987 and the statements of operations, reserve for capital assets and changes in financial position for the year then ended. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests and other procedures as we considered necessary in the circumstances.

In our opinion, these financial statements present fairly the financial position of the Centre as at March 31, 1987 and the results of its operations and the changes in its financial position for the year then ended in accordance with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

Ward Mallette

Ward Mallette

Chartered Accountants

24 April 1987

	1987	1986
REVENUE		
Technical contracts and seminars	\$1,067,317	\$1,255,216
Technology Enhancement Program (Note 3)	(27,675)	(278,359)
Technology Upgrading for Manufacturers' revenue	-	14,228
Interest income	55,612	60,251
Net revenue	1,095,254	1,051,336
EXPENSE		
Advertising	50,755	69,570
Bad debts	34,363	214,727
Computer maintenance	325,929	335,564
Consulting	240,833	294,159
Depreciation and amortization	899,873	767,305
Hotel and equipment rental	31,176	28,173
Postage	129,456	76,512
Printing	179,778	221,096
Recruiting and relocation	4,223	1,369
Salaries and benefits	1,927,096	1,825,278
Staff development	24,423	18,411
Supplies and services	236,760	232,751
Technical — 3rd party costs	39,255	249,350
Telephone and rent	329,287	285,748
Technology Upgrading for Manufacturers' expenses	-	14,228
Travel and accommodation	225,418	174,056
	4,678,625	4,808,297
EXCESS OF EXPENSE OVER REVENUE		
	3,583,371	3,756,961
CONTRIBUTION FROM PROVINCE OF ONTARIO (Note 4)	3,583,371	3,756,961
	\$ —	\$ —
NET REVENUE TO EXPENSE RATIO		
(Excludes interest, depreciation and Technology Upgrading for Manufacturers)	28%	24%
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		STATEMENT OF OPERATIONS
		FOR THE YEAR ENDED MARCH 31, 1987

STATEMENT OF RESERVE FOR CAPITAL ASSETS

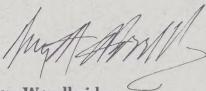
FOR THE YEAR ENDED MARCH 31, 1987

	1987	1986
CONTRIBUTIONS FROM PROVINCE OF ONTARIO (Note 4)		
Allocated to capital expenditures	\$ 369,025	\$1,000,038
Less disposals	(2,587)	(16,281)
	366,438	983,757
TRANSFER TO OPERATIONS (Note 4)		
	899,873	767,305
	(533,435)	216,452
BALANCE, BEGINNING OF YEAR	2,536,004	2,319,552
BALANCE, END OF YEAR	\$2,002,569	\$2,536,004
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ASSETS		
CURRENT ASSETS		
Cash	\$ 3,436	\$ 500
Accounts receivable	161,777	406,334
Contracts in progress	62,988	126,847
Prepaid expenses	81,998	64,356
	310,199	598,037
FIXED ASSETS (Note 2)	2,002,569	2,536,004
	\$2,312,768	\$3,134,041
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LIABILITIES		
CURRENT LIABILITIES		
Accounts payable and accrued charges	\$ 212,921	\$ 479,945
Deferred revenue	9,195	30,073
Province of Ontario	88,083	88,019
	310,199	598,037
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EQUITY		
RESERVE FOR CAPITAL ASSETS	2,002,569	2,536,004
	\$2,312,768	\$3,134,041
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		BALANCE SHEET
AS AT MARCH 31, 1987		

Approved on behalf of the Board:



Charles Williams
Chairman of the Board



Roy Woodbridge
Director

STATEMENT OF CHANGES IN FINANCIAL POSITION

FOR THE YEAR ENDED MARCH 31, 1987

	1987	1986
CASH FROM OPERATIONS		
Contributions from Province of Ontario	\$2,683,562	\$2,804,243
Cash receipts from clients	1,292,817	580,399
Payments for operating expenses	(4,029,055)	(3,629,529)
Interest received	55,612	60,251
	2,936	(184,636)
Contributions from Province of Ontario for acquisition of capital assets	366,438	983,757
Purchase of fixed assets (net of disposals)	(366,438)	(983,757)
CHANGE IN CASH DURING YEAR	2,936	(184,636)
CASH, BEGINNING OF YEAR	500	185,136
CASH, END OF YEAR	\$ 3,436	\$ 500

1. SIGNIFICANT ACCOUNTING POLICIES

The financial statements have been prepared in accordance with generally accepted accounting principles, and reflect the following policies:

Fixed Assets

Fixed assets are stated at cost. Equipment and furniture are depreciated by the straight-line method at rates calculated to amortize the cost of the assets, less salvage value, over their estimated useful lives. Leasehold improvements are amortized by the straight-line method over the term of the lease.

Contributions from the Province of Ontario

Contributions are made without reference to source or type of expenditure. The allocation shown in the financial statements is based on the capital assets expenditures and the balance is designated for operations.

Contributions for capital assets are credited to reserve for capital assets and recognized as income as the depreciation on the related assets are charged against operations.

Contributions for operations are recognized as revenue in the period in which they are committed by the Province. The excess of contributions received from the Province over net expenses are accounted for as a liability to the Province.

Revenue Recognition

Contract Revenue is recognized on the percentage-of-completion basis.

Contracts in progress

Contracts in progress represents the net realizable value of all unbilled customer work determined as a percentage of the total contract amounts.

NOTES TO THE FINANCIAL STATEMENTS

FOR THE YEAR ENDED MARCH 31, 1987

2. FIXED ASSETS

	1987			1986	
	Cost	Accumulated Depreciation and Amortization	Net Book Value	Net Book Value	Depreciation Rates
Technical equipment	\$3,867,775	\$2,114,493	\$1,773,282	\$2,181,938	20%
Office equipment	282,538	174,837	107,701	134,798	20%
Office furniture	327,363	223,823	103,540	166,334	20%
Leasehold improvements	207,173	189,127	18,046	52,934	Lease Term
	\$4,704,849	\$2,702,280	\$2,002,569	\$2,536,004	

Depreciation and amortization for the year totalled \$899,873 (1986 - \$767,305).

The Centre's premises are occupied under a lease which expires September 30, 1987. The rental for the remaining 6 month term is approximately \$130,000. The Centre has entered into a lease commitment commencing October 1, 1987 and expiring December 31, 1988. The rental under this arrangement is approximately \$168,000 per annum.

3. TECHNOLOGY ENHANCEMENT PROGRAM

The Technology Enhancement Program (TEP) was established to provide assistance to corporations or individuals requiring microelectronic technology. The assistance is restricted to qualifying contract work performed by the Centre. Under the terms of the assistance a royalty agreement provides for repayment of the assistance from the benefits of the applied technology.

Details of the current year's amount are as follows:

TEP contracts completed and in process	\$55,950
Paid by clients	28,275
Amount included in contributions from Province of Ontario	\$27,675

4. CONTRIBUTIONS FROM PROVINCE OF ONTARIO

	1987	1986
Total Contributions	\$3,050,000	\$3,788,000
Less amounts assigned to capital assets (net of disposals 1987 - \$2,587, 1986 - \$16,281)	366,438	983,757
	2,683,562	2,804,243
Transfer from reserve for capital assets	899,873	767,305
	3,583,435	3,571,548
Decrease (increase) in refund of excess contributions	(64)	185,413
Contribution to operations	\$3,583,371	\$3,756,961

5. COMPARATIVE FIGURES

The comparative figures as at March 31, 1986 and for the year then ended were reported on by the Centre's previous auditor.

NOTES TO THE FINANCIAL STATEMENTS

FOR THE YEAR ENDED MARCH 31, 1987

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